

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

T-REX PROPERTY AB §  
v. § CASE NO. 6:16-CV-927-RWS-KNM  
REGAL ENTERTAINMENT, et al., § Consolidated Lead Case  
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**MEMORANDUM OPINION AND ORDER**

This Memorandum Opinion construes the disputed claim terms<sup>1</sup> in United States Patent Nos. RE39,470 (“the ‘470 Patent”), 7,382,334 (“the ‘334 Patent”), and 6,430,603 (“the ‘603 Patent”) (collectively, “the patents-in-suit”) asserted in this suit by T-Rex Property AB (“Plaintiff”) against Defendants.<sup>2</sup>

On December 7, 2017, the parties presented oral arguments on the disputed claim terms at a *Markman* hearing. For the reasons stated herein, the court **ADOPTS** the constructions set forth below.

**BACKGROUND**

Plaintiff alleges that Defendants infringe three asserted patents: the ‘470 Patent, the ‘334 Patent, and the ‘603 Patent. The patents-in-suit relate to systems that allow “external information mediators [to] dynamically control in real time the transmission of display instruction.” Doc. No. 1 at 3. The ‘334 Patent and the ‘470 Patent are expired.

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<sup>1</sup> The parties submitted four additional claim terms in their Joint Claim Construction and Prehearing Statement. Doc. No. 84). However, these four terms were not briefed and thus there is no dispute as to their claim scope.

<sup>2</sup> The remaining Defendants are Clear Channel Outdoor Holdings, Inc., Clear TV Media USA, Inc., and Monster Vision, LLC B/B/A Monster Media

## **APPLICABLE LAW**

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313–1314; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. Courts give claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent as a whole. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language provides substantial guidance in the Court’s construction of claim terms. *Phillips*, 415 F.3d at 1314. “[T]he context in which a term is used in the asserted claim can be highly instructive.” *Id.* Other claims, asserted and un-asserted, can provide additional instruction because “terms are normally used consistently throughout the patent.” *Id.* The differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *see also Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002).

In the specification, a patentee may define his own terms, give a claim term a different meaning than the ordinary meaning of the term, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. While the Court generally presumes terms possess their ordinary meaning, statements of clear disclaimer can overcome this presumption. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). Further, this presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. For example, “[a] claim interpretation that excludes a preferred embodiment from the scope of the claim ‘is rarely, if ever, correct.’” *Globetrotter Software, Inc. v. Elan Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent”). The well-established doctrine of prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed.

Cir. 2003). The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002); *see also Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994 (Fed. Cir. 2003) (“The disclaimer . . . must be effected with ‘reasonable clarity and deliberateness.’”) (citations omitted). “Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed. Cir. 1988) (quotation omitted). “As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Omega Eng’g, Inc.*, 334 F.3d at 1324.

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” the Court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

## ANALYSIS

### I. Disputed Terms in the '470 Patent<sup>3</sup>

The '470 Patent is a reissue of United States Patent No. 6,005,534, which was filed on July 2, 1996. The '470 Patent is titled "Digital Information System," and was reissued on January 16, 2007. The '470 Patent is expired. The Abstract of the '470 Patent states:

The invention relates to a digital information system (10) for displaying information on at least one display means with the aid of at least one projector (22). The exposures are presented at places accessible to and frequented by a general public. The information system (10) includes external information mediators (24) and information is controlled dynamically through the medium of a communication interface (26) and through the medium of an exposure handler in a central computer (28). The inventive system also include a communication interface (14) against an elective number of station computers (34) having connected projector computers (38) which control projectors (22) for displaying pictures or exposures. The station computers (34) and peripheral equipment are situated at mutually distanced placed. According to one particular field of use, the places mentioned are subway stations (16, 18, 20) and projectors (22) project exposures or pictures onto display means positioned at selected places in the stations (16, 18, 20).

#### a. "permitting said exposure list to be dynamically updated" (Claim 25)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
"providing the functionality to update the exposure list when and as needed"	"automatically sorting in real time control instructions received from the external information mediator into an existing exposure list"

The underlying dispute is whether "dynamically updated" is required to be "in real time." The parties also dispute whether "dynamic updating" is limited to "automatically sorting" control instructions "into an existing exposure list."

Plaintiff argues that "dynamically update" means "update when and as needed." Plaintiff cites to the fourth edition of the Microsoft Computer Dictionary (1999), which defines "dynamic,"

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<sup>3</sup> The parties originally submitted the terms "control instructions" and "control instruction fields" for construction. During the *Markman* hearing, the parties agreed to plain and ordinary meaning for both terms. See Hearing Recording at 10:50 AM.

in part, as “describ[ing] some action or event that occurs when and as needed.” Doc. No. 87-8 at 5. Plaintiff also argues that the Court should adopt Plaintiff’s proposed construction because the PTAB adopted it in prior IPR proceedings. Doc. No. 87 at 9-10.

Defendants argue that the ‘470 Patent discloses dynamic updating as occurring automatically in “real time.” Doc. No. 89 at 8-9. (citing ‘470 Patent at 7:19–36, 8:27–34, 2:39–43, 7:11–17).

First, Plaintiff’s selective use of the Microsoft Computer Dictionary is unpersuasive. The first line of the Microsoft Computer Dictionary defines “dynamic” as “occurring immediately and concurrently.” Doc. No. 87-8 at 5. This portion of the definition is consistent with the intrinsic evidence, unlike the portion of the definition cited by Plaintiff, which does not accurately capture the distinction between the prior art “static” systems and the disclosed “dynamic” system.

For example, the specification states that the prior art “*static* information display systems” were “beset with a number of problems.” ‘470 Patent at 1:60-61 (emphasis added). The specification indicates that these static systems did not “enable information to be *updated dynamically* for display in real time.” *Id.* at 1:53-54 (emphasis added). The specification adds that “it should be possible *to update and change the information quickly*,” and “when the information displayed on said station is not effectively coordinated, the displays on which information is presented *will often become static . . .*” *Id.* at 2:28-30 (emphasis added). Like the ’470 Patent, the ’334 Patent similarly states that “the advertisement sent at cinemas during the projection of a film is *static, i.e. not instantly changeable*.” ‘334 Patent at 2:42-43 (emphasis added). Thus, the specification characterizes the prior art systems as “static” because they do not have the ability to instantaneously change information.

Specifically, the specification contrasts a two-week wait required by the prior art to the

instantaneous inclusion of the disclosed system:

At present a mediator which wishes to display information in public places is **normally forced to wait about two weeks, perhaps longer**, before his order can be implemented and the information publicly displayed. **With the inventive digital information system 10**, the information can be displayed principally in real time, *i.e. at the time of making the order, possibly with a short delay due to processing, fully-booked exposure lists and other quickly passing causes*. Furthermore, an external information mediator 24 is able to put through information to the system 12 twenty-four hours a day, whereupon **the information can be included instantaneously in an exposure list**, as illustrated in more detail below.

‘470 Patent at 5:22-35 (emphasis added). The specification further states that:

“[an] object of the invention is to enable a picture, image or other information to be changed in practice as often as is desired, in real time, therewith **providing direct and immediate communication**, and to enable similar or specific information to be displayed in places that are mutually far apart and to enable message information to be alternated with advertising spots, for instance.”

*Id.* at 2:49-56. (emphasis added)

The specification further provides an example of an advertising subscriber that “may buy spots individually or in a special package, and the digital information system is able to insert a change **at short notice** or to operate a completely new spot.” *Id.* at 9:22-25 (emphasis added). The specification adds that “[t]he system is thus highly flexible and enables **quick changes** to be made with regard to what shall be exposed on the exposure means, where it shall be exposed and when.”

*Id.* at 9:25-28 (emphasis added). Thus, the specification indicates that “dynamically updated” relates to the speed or time it takes to update the information. In contrast to a “static” systems that cannot make instant changes, the disclosed “dynamic” systems can instantaneously change the exposure list or change the exposure list after a short delay due to processing or other quickly passing cause. *See, e.g.*, ‘470 Patent at 5:26-31 (“With the inventive digital information system 10, the information can be displayed principally in real time, *i.e.* at the time of making the order, possibly

with a short delay due to processing, fully-booked exposure lists and other quickly passing causes.”).

Turning to Plaintiff’s construction, there is no direct support for “when and as needed” in the intrinsic evidence. Instead, the portions of the specification cited by Plaintiff refers to updating and changing information “quickly,” “instantaneously,” “direct and immediate,” or “at short notice.” Doc. No. 87 at 14 (citing ‘470 Patent at 2:26-27, 2:49-53, 5:30-35, 9:23-28). Further, “as needed” creates more ambiguity than clarity.

Moreover, Plaintiff’s argument that the Court should follow the construction adopted in the IPR proceedings is unpersuasive. First, the petitioners to the IPRs did not provide an explicit construction for “dynamically updated.” Doc. No. 87-5 at 13, 87-6 at 13. Second, the construction adopted by the PTAB was based on the extrinsic dictionary definition provided by the patentee. Doc. Nos. 87-5 at 14, 87-6 at 14. As discussed above, the portion of the definition that is consistent with the intrinsic evidence is the part that defines “dynamic” as “occurring immediately and concurrently,” and not as “when and as needed.” *Phillips*, 415 F.3d at 1319 (“[E]xtrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.”).

Turning to Defendants’ construction, it is unclear what the parties understand “real time” to mean because Defendants do not offer a meaning for the term. Plaintiff argues that Defendants’ construction would render the claim language redundant because the ‘470 Patent includes claims that specify that “dynamically updating” occurs “in real time.” Doc. No. 92 at 4. Plaintiff also argues that “although ‘real time’ updating is an objective of some embodiments of the invention, this does not mean that it must be imported into the claims.” Doc. No. 92 at 4.

As discussed above, a person of ordinary skill in the art would understand that “dynamic

“updating” occurs instantaneously or after a short delay. The embodiment referred to by Plaintiff is “*an alternative* to the dynamic updating of the exposure list.” ‘470 Patent at 8:10-11 (emphasis added). Accordingly, Plaintiff’s argument that “dynamically updated” does not require an instantaneous change or change after a short delay fails. Defendants’ in “real time” argument similarly fails because it does not add clarity.

Defendants’ “automatically sorting” proposal is also unpersuasive. The disputed term is “*permitting* said exposure list to be dynamically updated.” The “*permitting*” language indicates that the exposure list has to be *capable* of being dynamically updated and Defendants’ proposal replaces this capability with a required “sorting.”

Furthermore, the intrinsic evidence does not indicate that “updating” requires “sorting.” The language of claim 1 explicitly distinguishes “dynamically updating an exposure list” from “generating or organizing an exposure list.” ‘470 Patent at 14:32–33 (“generating, organizing, and dynamically updating an exposure list in real time”). Likewise, claims 25 and 26 expressly recite that the control instructions are used to “generate” an exposure list, not that the control instructions must be “automatically sorted.” At best, the portion of the specification cited by Defendants may be a requirement for generating or organizing the exposure list, but it is not a requirement for the term “updating.” Doc. No. 89 at 8; ‘470 Patent at 7:19–36. The specification also indicates that this is only “one embodiment of the invention.” ‘470 Patent at 7:19.

The remainder of Defendants’ proposed language is redundant and unnecessary. Claim 25 recites “receiving control instructions from at least one external information mediator” and “using said control instructions to generate an exposure list.” Defendants have not provided a persuasive reason to repeat this language in this phrase.

Defendants’ “existing exposure list” proposal is also rejected. Claim 25 generally recites

the steps of: (1) receiving control instructions from at least one external information mediator; (2) using the control instructions to generate an exposure list; (3) displaying images in accordance with said exposure list; and (4) permitting the exposure list to be dynamically updated. The exposure list in step 2 provides antecedent basis for “said exposure list” in step 4. Thus, the claim language indicates that the exposure list generated in step 2 is the exposure list updated in step 4. Thus, there is no need to add “existing” to the construction.

Accordingly, the Court construes the disputed term **“permitting said exposure list to be dynamically updated”** to mean **“providing the functionality to instantaneously change the exposure list or change the exposure list after a short delay due to processing or other quickly passing cause.”**

**b. “means for generating and dynamically updating an exposure list from said control instructions” (Claim 26)**

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>Function: “generating and updating when and as needed an exposure list from control instructions”</p> <p>Structure: a “central computer” (central computer 28 of Fig. 1 of ‘470 Pat.) and associated exposure handler (exposure handler 3 of Fig. 1 of ‘470 Pat.) configured to allocate information relating to projector control instructions according to the following algorithm: 1) mediator information is sorted into the exposure list in accordance with the wishes of the mediator or its instructions when available space is found in the exposure list or in alternative places in the exposure list given by the mediator; 2) if the exposure list is completely filled with instructions, the mediator instructions to the control centre remain in the queue list in the server in readiness for later inclusion in the exposure list (‘470 Pat. At 7:25-35) and equivalents thereof.</p>	<p>Function: “generating and dynamically updating an exposure list from said control instructions”</p> <p>Structure: software running on a computer server that creates an exposure list and automatically sorts the control instructions, in real time into an existing exposure list, according to the algorithms described in the ‘470 Patent, col. 7 ll. 18-36 or equivalents thereof.</p>

The parties agree that this is a means-plus-function term governed by 35 U.S.C. § 112, ¶

6. The parties also agree that the disputes for this term encompass the same issues as to the phrase “permitting said exposure list to be dynamically updated,” which was discussed above.

The Court agrees with the parties that the disputed term is subject to 35 U.S.C. § 112, ¶ 6.

Because this term encompasses the same issues as to the phrase “permitting said exposure list to be dynamically updated,” the recited function is “generating and instantaneously changing the exposure list or changing the exposure list after a short delay due to processing or other quickly passing causes using the control instructions.”

Having determined the limitation’s function, “the next step is to determine the corresponding structure disclosed in the specification and equivalents thereof.” *Medtronic, Inc. v. Advanced Cardiovascular Sys.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). The parties both point to the same portions of the disclosure for the algorithm, which states the following:

The server 3 of the central computer 28 functions partly as an exposure handler. The exposure handler 3 carries out the important object of the invention with regard to the possibility of an external mediator 24 to organize the information delivered to the station 16, 18, 20 via an exposure list, this organizing of information being effected in real time via the modem 26 and the server 1 that receives projector control information from the external mediator.

In one [invention] embodiment of the invention, a queue, or line, is created from the information material received by the server 1, in accordance with some known line or queuing method, such as FIFO (First In First Out), LIFO (Last In First Out) or Round Robin, etc., wherein the server 3 or exposure handler 3 has set-up or created an exposure list which covers a twenty-four hour period for information exposure or display via projectors 22. The exposure handler 3 collects and processes, i.e. allocates, information relating to projector control instructions, wherein mediator information is sorted into the exposure list in accordance with the wishes of the mediator 24 or its instructions, when available space is found in the exposure list or in alternative places in the exposure list given by the mediator. If the exposure list is completely filled with instructions, the mediator instructions to the control centre remain in the queue list in the servo 1 in readiness for later inclusion in the exposure list, in accordance with a preferred embodiment.

‘470 Patent at 7:10-36.

The Court agrees with the parties that the above-recited portion of the specification is the corresponding algorithm. As indicated, this portion identifies the corresponding structure as Server 3 of the central computer 28 configured to perform the steps of: (1) setting-up or creating an exposure list for a specified time period; (2) sorting mediator information into the exposure list in accordance with the wishes of the mediator or its instructions, when available space is found in the exposure list or in alternative places in the exposure list given by the mediator; and (3) if the exposure list is completely filled with instructions, the mediator instructions to the control centre remain in the queue list in the server in readiness for later inclusion in the exposure list and equivalents thereof.

Thus, the disputed term **“means for generating and dynamically updating an exposure list from said control instructions”** is subject to 35 U.S.C. § 112, ¶ 6, and is construed to mean:

Function: **“generating and instantaneously changing the exposure list or changing the exposure list after a short delay due to processing or other quickly passing causes using the control instructions”**

Structure: **“Server 3 of central computer 28 configured to perform the steps of: (1) setting-up or creating an exposure list for a specified time period; (2) sorting mediator information into the exposure list in accordance with the wishes of the mediator or its instructions, when available space is found in the exposure list or in alternative places in the exposure list given by the mediator; and (3) if the exposure list is completely filled with instructions, the mediator instructions to the control centre remain in the queue list in the server in readiness for later inclusion in the exposure list and equivalents thereof.”**

c. “means for displaying images in accordance with said exposure list associated with each one of said computerized devices” (Claim 26)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Function: “displaying imaged based on exposure list”  Structure: “displaying devices, such as free standing picture screens, wall-mounted screens, walls, and overhead screens, projectors, or other means suitable for reproducing or exposing picture information in the form of text, stills, movable pictures, images, etc.” (‘470 Pat. 4:32-42) and equivalents thereof.	Function: “displaying images in accordance with said exposure list associated with each one of said computerized devices”  Structure: station computer 34, projector computer 38

The parties agree that this is a means-plus-function term governed by 35 U.S.C. § 112, ¶

6. The parties dispute the scope of the function and its corresponding structure. Plaintiff argues that Defendants seek to improperly import a structural limitation into the function of this term. Doc. No. 87 at 27. Defendants respond that the phrase “associated with each one of said computerized devices” modifies the “exposure list,” which the parties agree is part of the recited function. Doc. No. 89 at 21.

The Court agrees with the parties that the disputed term is governed by 35 U.S.C. § 112, ¶ 6, and that the “exposure list” is part of the recited function. Plaintiff’s contention that Defendants’ proposal improperly imports a structural limitation is unpersuasive. Claim 26 recites that the images are displayed “in accordance with said exposure list,” and that this “exposure list” is the one “associated [sic] with each one of said computerized devices.” Defendants’ proposed construction specifies that the recited “exposure list” is received by the computerized device from the control center, as recited in claim 26.

Plaintiff also contends that the specification teaches that the exposure list does not need to be associated with each computerized device. Doc. 92 at 8 (citing ‘470 Patent at 9:63-66). This is

incorrect. The specification states that the “facility is controlled via the exposure list.” ‘470 Patent at 9:65-66. Moreover, the claim explicitly recites that the exposure list is the one “associated [sic] with each one of said computerized devices.” Accordingly, the recited function is “displaying images in accordance with the exposure list associated with each one of said computerized devices.”

Having determined the limitation’s function, “the next step is to determine the corresponding structure disclosed in the specification and equivalents thereof.” *Medtronic*, 248 F.3d at 1311. Plaintiff argues that its proposed structure is clearly linked to the function recited in the claim, i.e. “display images.” Doc. No. 87 at 28 (citing ‘470 Patent at 4:32-42).

However, the specification indicates that the corresponding structure is projector computer 38 connected to projector 22 or an electronic display. Specifically, the specification states:

In one embodiment of the invention relating to subway station 1, the computerized device 16 is comprised of a station computer (server) which either includes or is connected externally to a hard disk 36, *wherein the station computer 34 is connected to a plurality of projector computers 38*, three such projector computers in the illustrated case, *which transmit control information to connected projectors 22*, only one of which is shown. *The projector computers 38 have the form of PC units with picture screens in the illustrated case. The information sent to projectors 22 can be monitored on the picture screens of the PC units 35 and edited by personnel stationed at different locations within the subway station 16, or from a central location.* In the illustrated embodiment, station 2, referenced 18, and station 3, referenced 20, comprise other subway stations that are equipped with devices similar to the devices of the subway station 16, although without showing the projector computers 38 and the projector 22. *It is assumed, however, that these stations also include projector computers 38 and at least one projector 22.*

‘470 Patent at 6:1-20 (emphasis added). The specification also states that “[t]he exposures are received on respective stations by a station computer 34 (station server), *wherein each projector 22 has an individual projector computer 38 which controls and feeds pictures in the projector or projectors 22.* Projector computer 38 are controlled by the station computer 34.” *Id.* at 9:44-48

(emphasis added). The specification further states that “[i]n yet another embodiment of the devices included in the computerized devices 16, 18, 20, *the projector 22 is replaced with an electronic display (not shown)*, such as a large picture screen in LCD technology, light-emitting diode technology (LED technology) or the like.” *Id.* at 6:25-29 (emphasis added). Accordingly, the corresponding structure identified in the specification is projector computer 38 connected to projector 22 or an electronic display.

Plaintiff’s proposed structure fails to include this corresponding structure. Plaintiff’s construction includes examples of devices that may be used to receive the displayed images. For example, freestanding picture screens, wall-mounted screens, walls, and overhead screens may be used to receive the image from projector 22. These devices are not excluded from aiding the corresponding structure to accomplish the recited function. However, these exemplary devices do not constitute the corresponding structure clearly linked to performing the recited function. In fact, none of these exemplary devices are included in the only figure included in the ‘470 Patent. Rather, it is projector computer 38 and projector 22 that are included in the figure and further disclosed in the specification.

Defendants’ proposed structure includes “station computer 34.” However, the preceding element to the disputed term recites “*a computerized device* situated at each one of said plurality of locations, *each computerized device* being electronically coupled to said computerized control center.” Thus, computer 34 would be considered the “computerized device,” and not the “means for displaying images.” Thus, the “computerized device” is a separate element from the “means for displaying images.”

Thus, the disputed term “**means for displaying imagines in accordance with said exposure list associated with each one of said computerized devices**” is subject to 35 U.S.C. §

112, ¶ 6, and is construed to mean.

Function: “**displaying images in accordance with the exposure list associated with each one of said computerized devices**”

Structure: “**projector computer 38 connected to projector 22 or an electronic display, or equivalents thereof.**”

- d. “**external information mediator**” (Claim 25 of the ‘470 Patent); “**mediators**”/“**mediators of information**” (Claims 22 and 32 of the ‘334 Patent)

Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
<b>external information mediator</b>	“third-party supplier of information for display”	“third party supplier of information that request when, where, for how long, and how information will be displayed, but does not itself update the exposure list”
<b>mediator/mediators of information</b>	“suppliers of information for display”	“third party supplier of information that request when, where, for how long, and how information will be displayed, but does not itself update the exposure list”

There are three underlying disputes with these terms: (1) whether a mediator must be a third-party; (2) whether mediators can update the exposure list themselves; and (3) whether a mediator must request when, where, for how long, and how information will be displayed.

*i. Whether a mediator must be a third party*

Plaintiff argues that the Defendants’ construction improperly imports “external” into the disputed terms. Doc. No. 87 at 24. Defendants argue that all mediators must be third parties, because the patents define mediators as third party suppliers of information. Doc. No. 89 at 25.

The patents state:

The term information mediator (24) used in the following shall be interpreted in its widest meaning, i.e. as not only referring to advertising agencies but to all companies and private persons who wish to utilize the system 10 for commercial reasons or for the display of information that concerns a general public. At present a mediator which wishes to display information in public places is normally forced to wait about two weeks, perhaps longer, before his order can be implemented and the information publicly displayed. With the inventive digital information system 10, the information can be displayed principally in real time, i.e. at the time of making the order, possibly with a short delay due to processing, fully-booked exposure lists and other quickly passing causes. Furthermore, an external information mediator 24 is able to put through information to the system 12 twenty-four hours a day, whereupon the information can be included instantaneously in an exposure list, as illustrated in more detail below.

'334 Patent, 6:46–63; *see also* '470 Patent, 5:18–35. This portion of the specification indicates that a mediator is not always “external” because that would not be consistent with its “widest meaning.” However, the patentees limited “mediator” to an “external” mediator in the prosecution history of the '470 Patent. Specifically, the patentees amended the claims “to specify that the information mediator is an external information mediator.” Doc. No. 89-1 at 7 (emphasis in original). The patentees further argued:

Schmier et al fails to teach or suggest the step of receiving control instructions from at least one external information. The central processor 22 of Schmier et al is described as receiving vehicle location data from the vehicle microprocessor 16 and other vehicle-related data from the electronic storage means 24. **However, it is respectfully submitted that neither the microprocessor 16 nor the electronic storage means 24 can properly be considered to be an “external information mediator.” Both the microprocessor 16 and the electronic storage means 24 are key elements of the system of Schmier et al and are thus not external to the system.** In addition, neither of these elements is an information mediator as the term is defined in the present application (i.e., companies and private persons who wish to display information to a general public). **Accordingly, it is submitted that Schmier et al does not disclose the claimed step of receiving control instructions from at least one external information mediator.**

Doc. No. 89-1 at 8 (emphasis added).

Here, the patentee clearly and unambiguously limited the “mediator” to “external information mediators.” The parties agree that “external” in this context means “third-party

supplier,” which is consistent with the intrinsic evidence. Moreover, the patents use the term “administrator” to describe users of the system who are not third parties. ’334 Patent at 3:61–64 (“In one embodiment, the *system administrator* is able to update the exposure list with elective information at any time whatsoever, wherein the dynamic booking can be changed or delayed.”) (emphasis added); ’470 Patent at 3:19-23 (“The *administrator* of the digital information system is able to update the display list with desired information at any time whatsoever, wherein the dynamic booking can be changed or delayed.”). Accordingly, the intrinsic evidence indicates that the recited “mediator” must be a third party.

#### *ii. Whether mediators can update the exposure list themselves*

Plaintiff argues that Defendants’ construction improperly imports a limitation from a preferred embodiment that requires an intermediary to update the exposure list. Doc. No. 87 at 24. Defendants argue that the patents “lack any disclosure . . . indicating that mediators themselves are able to update the exposure list.” Doc. No. 89 at 24.

The specification indicates that an administrator may have access to change the exposure list, including changing or delaying the dynamic booking from the mediators. ’470 Patent at 3:19-22. However, the specification also expressly contemplates embodiments which permit direct access by the mediators. *See, e.g.*, ’334 Patent at 6:35-45 (“An important feature in this context, however, is that external information mediators 24 are able to give control instructions to the projectors 22 with regard to the information the external mediators 24 desire the system 10 to display via the projectors 22, each on its own initiative and communication-wise transparent via modems 26. This can be achieved in accordance with one embodiment of the invention without involving the working stations 32 in the procedure of transmitting the control instructions to the central computer 28.”), *Id.* at 6:59-63 (“Furthermore, an external information mediator 24 is able

to put through information to the system 12 twenty-four hours a day, whereupon the information can be included instantaneously in an exposure list.”).

Thus, the intrinsic evidence indicates that mediators are able to update the exposure list.

*iii. Whether a mediator must request when, where, for how long, and how information will be displayed*

Plaintiff argues that there is no textual reference for Defendants’ construction requiring that a mediator must request when, where, for how long, and how information will be displayed. Doc. No. 87 at 25. Defendants argue that the patents disclose that the mediators provide the information that requests when, where, for how long, or how information will be displayed. Doc. No. 89 at 25. During the *Markman* Hearing, Defendants acknowledged that the ‘470 Patent only requires that the exposure list specify “three or more” of the criteria for what, where, when, and for how long. *See* Hearing Recording at 9:33 AM.

As Defendants concede, the claims of the ‘470 Patent recite that the “exposure list” will specify some of these criteria. ‘470 Patent at 17:13-22 (“. . . said exposure list specifying three or more of the following items: [when, where, for how long, and how information will be displayed]”); *Id.* at 18:7-18 (“. . . said exposure list specifying three or more of the following items: [when, where, for how long, and how information will be displayed]”). Thus, Defendants’ requirement that the mediator must requests all four criteria is inconsistent with the claim language of the ‘470 Patent.

Further, the claims of the ‘334 Patent explicitly recite the criteria, and Defendants have failed to show that further qualification is warranted. ‘334 Patent at claim 22 (“. . . generating an exposure list . . . with regard to [when, where, for how long, and how information will be displayed]”); *Id.* at claim 32 (“. . . wherein said exposure list . . . controls the electronic displays in question with respect to [when, where, for how long, and how information will be displayed]”).

Accordingly, the Court construes the disputed terms as follows:

**“external information mediator”** to mean **“third-party supplier of information for display,”** and

**“mediator/mediators of information”** to mean **“third-party supplier of information for display.”**

## **II. Disputed Terms in the ‘334 Patent**

The ‘334 Patent is titled “Digital Information System,” was filed on July 18, 1998, and issued on June 3, 2008. The ‘334 Patent is expired. The Abstract states:

The invention relates to a digital information system for displaying information on at least one display means with the aid of at least one television set or camera. The exposures are presented at places accessible to and frequented by a general public. The information system includes external information mediators and information is controlled dynamically through the medium of communication interface and through the medium of an exposure handler in a central computer. The inventive system also includes a communication interface against and elective number of cinema computers having connected television or camera computers which control television sets or cameras for displaying pictures or exposures. The cinema computers and peripheral equipment are situated at mutually distanced places.

- a. **“update an exposure list having control instruction fields, via dynamic booking of display information from mediators” (Claim 32)**

<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“update when and as needed an exposure list having control instruction fields based on display information from mediators”	“update, in real time, an exposure list having control instruction fields, via dynamic booking of display information from mediators”

The parties agree that the disputed issues for this term are substantially the same as the ones for “permitting said exposure list to be dynamically updated” as discussed above. During the *Markman* hearing, the parties conceded that there was no dispute as to “dynamic booking.” *See* Hearing Recording at 10:01 AM.

Accordingly, the Court construes the disputed term **“update an exposure list having**

**control instruction fields, via dynamic booking of display information from mediators”** to mean “**instantaneously changing the exposure list or changing the exposure list after a short delay due to processing or other quickly passing causes, via dynamic booking of display information from mediators.”**

- b. “**able to create and update said exposure list in real time with control instruction fields via dynamic booking of information in time for exposure from mediators”** (Claim 22)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“able to create and update the exposure list when and as needed at the time information is submitted by the mediator with at most a short delay due to processing or other quickly passing causes using control instruction fields”	Indefinite.

Defendants argue that the phrase is indefinite because a person of ordinary skill in the art could read the phrase as either “dynamic [in time] booking of information for exposure,” or as “dynamic booking [in time] of information for exposure.” Doc. 89 at 13-14. Defendants contend that because there are two plausible yet inconsistent meanings of this term, the patent fails to inform a person of ordinary skill in the art what constitutes the scope of “in time for exposure from mediators.” *Id.* at 14.

Plaintiff replies that both of Defendants’ alternative readings ignore that the claim already specifies that “creat[ing] and updat[ing] said exposure list . . . with control instruction fields via dynamic booking of information” occur in real time. Doc. No. 92 at 6. Plaintiff contends that this “real time constraint indicates that that the dynamic booking occur in time for exposure (i.e., in time for exposure as needed).” *Id.*

Plaintiff’s argument is predicated on the Court correcting the claim language and redrafting the phrase as “able to create and update said exposure list in real time with control instruction

fields via dynamic booking of information [ ] from mediators *in time for exposure.*”

Generally “[t]he district court can correct an error only if the error is evident from the face of the patent.” *Group One*, 407 F.3d at 1303. Further, there are two additional requirements to permit correction: “(1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.” *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1357 (Fed. Cir. 2003). If these conditions are met, then a patent should not be invalidated based on the error unless there is “evidence of culpability or intent to deceive by delaying formal correction.” *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1331 (Fed. Cir. 2005).

Plaintiff has not argued that the Court should correct the claim language. This weighs against the argument that “the error [to be corrected] is evident from the face of the patent.” *Group One, Ltd. v. Hallmark Cards, Inc.*, 407 F.3d 1297, 1303 (Fed. Cir. 2005). Furthermore, Plaintiff does not cite to any intrinsic evidence in its brief to support its construction. Instead, Plaintiff argued during the *Markman* Hearing that its construction is the common sense reading of the claim based on its subjective parsing of the claim language.

Ultimately, Plaintiff’s parsing argument essentially asks the Court to redraft the claim language. However, it would be improper to redraft the claim as Plaintiff proposes. *Quantum Corp. v. Rodime, PLC*, 65 F.3d 1577, 1584 (Fed. Cir. 1995) (“[I]t is well settled that no matter how great the temptations of fairness or policy making, courts do not redraft claims.”). Accordingly, the claim fails to “inform those skilled in the art about the scope of the invention with reasonable certainty,” because the claim does not make sense as drafted. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014).

The term “**able to create and update said exposure list in real time with control**

instruction fields via dynamic booking of information in time for exposure from mediators”

is indefinite.

- c. “computerized control center means” (Claim 32) and “exposure handler means whereby the control center functions, in real time and through the medium of said exposure handler, to create and update and exposure list having control instruction fields, via dynamic booking of display information from mediators” (Claim 32)

Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
<b>computerized control center means</b>	<p>Function: “receive and process information from information mediators and transmit information to electronic display stations”</p> <p>Structure: “control center 12” (‘334 Pat. Of Fig. 1; 5:59-6:7; 6:17-26) and equivalents thereof</p>	<p>Function: Indefinite.</p> <p>Structure: Indefinite.</p>
<b>exposure handler means whereby the control center functions, in real time and through the medium of said exposure handler, to create and update and exposure list having control instruction fields, via dynamic booking of display information from mediators</b>	<p>Function: “create and update when and as needed an exposure list having control information fields based on display information from mediators”</p> <p>Structure: a “central computer” (central computer 28 of Fig. 1 of ‘334 Pat.) and associated exposure handler and associated exposure handler (exposure handler 3 of Fig. 1 of ‘334 Pat.) configured to allocate information relating to projector control instructions according to the following algorithm: 1) mediator information is sorted into the exposure list in accordance with the wishes of the mediator or its instructions when available space is found in the exposure list or in alternative places in the exposure list given by the mediator; 2) if the exposure list is completely filled with instructions, the mediator</p>	<p>Function: “creating and updating an exposure list having control instruction fields, via dynamic booking of display information from mediators”</p> <p>Structure: software running on a computer server that creates an exposure list and automatically sorts control instructions, in real time, into an existing exposure list according to the algorithms described in ‘470 Patent, col. 7 ll. 18-36 and ‘334 Patent, col. 8l. 25 to col. 9 l. 3, or equivalents thereof</p>

	instructions to the control centre remain in the queue list in the server in readiness for later inclusion in the exposure list ('334 Pat. at 8:30-51, 8:59-9:2) and equivalents thereof	
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The parties agree that these phrases are subject to § 112, ¶ 6. The underlying dispute for the phrase “control center means” is whether the structure and function are indefinite. The underlying dispute for the phrase “exposure handler means” is similar to the parties’ dispute for the phrase “means for generating and dynamically updating an exposure list from said control instructions” discussed above.

The Court construes the identified terms as one phrase because they are intertwined elements. Claim 32 recites the following:

32. An arrangement for coordinating and controlling electronic displays in a digital information system for displaying information on at least one display device through the medium of at least one electronic display, . . .

***computerized control center means***, wherein the control center has communication interfaces against;

. . .  
***exposure handler means*** whereby ***the control center functions***, in real time and ***through the medium of said exposure handler***, to create and update an exposure list having control instruction fields, via dynamic booking of display information from mediators; . . .

‘334 Patent at Claim 32 (emphasis added).

Here, the “control center means” functions through the “exposure handler means.” Specifically, the “exposure handler means” recites the function of the control center as creating and updating “an exposure list having control instruction fields, via dynamic booking of display information from mediators.” This part of the claim further recites that the control center performs this function “through the medium of said exposure handler.” The “control center means” term further indicates that the control center performs communication functions by reciting “wherein

the control center has communication interfaces.”

The parties dispute the recited function for the “exposure handler means,” but agree that the dispute is the same as the phrase “permitting said exposure list to be dynamically updated.” For the reasons discussed above, the recited function is “create and instantaneously change the exposure list or change the exposure list after a short delay due to processing or other quickly passing causes, via dynamic booking of display information from mediators.”

Having determined the limitation’s function, “the next step is to determine the corresponding structure disclosed in the specification and equivalents thereof.” *Medtronic*, 248 F.3d at 1311. As discussed above, the claim recites that the control center has communication interfaces. The corresponding structure for the communication interface is disclosed in the specification as communication interface 14 and modem 26. The specification states:

[T]he system is comprised of a control center 12 having a communication interface 14 which connects an unlimited number of computerized devices 16, 18, 20 which are placed at desired distances from one another for the control of television sets 40 or cameras 22.

‘334 Patent at 5:59-63. The specification also states: “[t]he illustrated system also includes an information mediator which is connected to the control center 12 through the medium of a computer 24 and a modem 26.” *Id.* at 5:64-66. Thus, the corresponding structure for the communication interface is interface 14 and modem 26.

The specification further states that the control center 12 includes central computer 28, which is “divided into three powerful servers 1, 2, 3.” ‘334 Patent at 8:31-32. In describing the servers, the specification states:

[S]erver 1 receives material from external information mediators 24, via modems 26, wire or wireless or combinations of them. Server 2 sends information material to the cinema computers 34. The same material can be sent to all cinema computers 34, even though the information is to be displayed solely on a given

display or on given displays. What shall be exposed and where it shall be exposed will be explained in more detail below.

Server 3 functions to process information and control instructions received from the information mediator 24, as described in more detail below.

The server 3 of the central computer 28 functions partly as an exposure handler. The exposure handler 3 carries out the important object of the invention with regard to the possibility of an external mediator 24 to organize the information delivered to the cinema 16, 18, 20 via an exposure list, this organizing of information being effected in real time via the modem 26 and the server 1 that receives television set or camera control information from the external mediator.

‘334 Patent at 8:31-51. Thus, the corresponding structure includes servers 1, 2, 3 of central computer 28.

With respect to the disclosed algorithm, the parties cite to the same portions of the disclosure for the algorithm related to the “exposure handler means,” which states:

In one embodiment of the invention, a queue, or line, is created from the information material received by the server 1, in accordance with some known line or queuing method, such as FIFO (First In First Out), LIFO (Last In First Out) or Round Robin, etc., wherein the server 3 or exposure handler 3 has set-up or created an exposure list which covers a twenty-four hour period for information exposure or display via television set or cameras 22. The exposure handler 3 collects and processes, i.e. allocates, information relating to television set or camera control instructions, wherein mediator information is sorted into the exposure list in accordance with the wishes of the mediator 24 or its instructions, when available space is found in the exposure list or in alternative places in the exposure list given by the mediator. If the exposure list is completely filled with instructions, the mediator instructions to the control center remain in the queue list in the server 1 in readiness for later inclusion in the exposure list, in accordance with a preferred embodiment.

‘334 Patent at 8:52-9:3. Thus, the corresponding structure is interface 14, modem 26, servers 1, 2, 3 of central computer 28 configured to perform the steps of: (1) receiving information from mediators; (2) setting-up or creating an exposure list for a specified time period; (3) sorting mediator information into the exposure list in accordance with the wishes of the mediator or its instructions, when available space is found in the exposure list or in alternative places in the

exposure list given by the mediator; (4) if the exposure list is completely filled with instructions, the mediator instructions to the control centre remain in the queue list in the server in readiness for later inclusion in the exposure list; and (5) sending information to the computerized devices and equivalents thereof.

Defendants also argue that the phrase “computerized control center means” is indefinite because the specification does not disclose any structure that performs a control function separate from the exposure list. Doc. No. 89 at 17. As discussed above, the “control center means” functions through the “exposure handler means,” which the parties do not dispute includes structure. In addition, the claim indicates that the “control center means” has communication interfaces, which the specification discloses as interface 14 and modem 26. ‘334 Patent at 5:64-66. Likewise, the specification states that the control center 12 includes central computer 28, which is “divided into three powerful servers 1, 2, 3.” ‘334 Patent at 8:31-32. This is the corresponding structure that performs the function of “create and instantaneously change the exposure list or change the exposure list after a short delay due to processing or other quickly passing causes, via dynamic booking of display information from mediators”

Plaintiff argues that the function of the control center means is to “receive and process information from information mediators and transmit information to electronic display stations.” According to Plaintiff, the specification explains that this is the function of a computerized control center. Doc. No. 87 at 21. However, this is not the function recited in the claim. *See Smiths Indus. Med. Sys., Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1357 (Fed. Cir. 1999) (noting that it is the recited “function alone that serves as the touchstone for identifying the disclosed, corresponding structure”). Instead, the function recited is “create and instantaneously change the exposure list or change the exposure list after a short delay due to processing or other quickly passing causes, via

dynamic booking of display information from mediators.”

Thus, the terms “**computerized control center means**” and “**exposure handler means whereby the control center functions, in real time and through the medium of said exposure handler, to create and update and exposure list having control instruction fields, via dynamic booking of display information from mediators**” are subject to 35 U.S.C. § 112, ¶ 6, and are construed to mean:

Function: “**create and instantaneously change the exposure list or change the exposure list after a short delay due to processing or other quickly passing causes, via dynamic booking of display information from mediators.**”

Structure: “**interface 14, modem 26, servers 1, 2, 3 of central computer 28 configured to perform the steps of: (1) receiving information from mediators; (2) setting-up or creating an exposure list for a specified time period; (3) sorting mediator information into the exposure list in accordance with the wishes of the mediator or its instructions, when available space is found in the exposure list or in alternative places in the exposure list given by the mediator; (4) if the exposure list is completely filled with instructions, the mediator instructions to the control centre remain in the queue list in the server in readiness for later inclusion in the exposure list; and (5) sending information to the computerized devices and equivalents thereof.**”

d. “**computerized control center means for coordinating and controlling electronic displays**” (Claim 32)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Function: coordinating and controlling electronic displays  Structure: computerized devices, such as servers ('334 Pat. 16, 18, 20 of Fig. 1; 4:53-55; 6:13-16; 7:17-20; 7:30-52), configured	Function: coordinating and controlling electronic displays  Structure: indefinite.

according to the following algorithm: 1) generating an exposure list comprising control instructions for coordinating and controlling television sets with regard to what shall be exposed, when it shall be exposed, where it shall be exposed and for how long it shall be exposed; and 2) creating and updating said exposure list in real time with control instruction fields via dynamic booking of information in time for exposure from mediators, wherein the exposure list enables each television set to be controlled, independently of other television sets, to receive the same or different information in accordance with the exposure list for exposure of respective television set through the computerized devices and equivalents thereof.

The parties agree that the disputed term is governed by § 112, ¶ 6. The underlying dispute is whether the specification disclose sufficient corresponding structure for the disputed term.

Defendants argue that Plaintiff's proposed structure is redundant because the algorithm is performed by the "exposure handler means." Doc. No. 89 at 19. Defendants also argue that the disputed term is indefinite because the specification does not disclose an adequate corresponding structure. *Id.*

However, the parties agree that the recited function is "coordinating and controlling electronic displays." Claim 32 recites that the exposure list "coordinates and controls the electronic displays . . ." Thus, claim 32 indicates that the exposure list is part of the algorithm used to perform the recited function of the computerized means.

Having determined the limitation's function, "the next step is to determine the corresponding structure disclosed in the specification and equivalents thereof." *Medtronic*, 248 F.3d at 1311. The specification states that "[i]n accordance with the invention, the control center 12 has a communication interface 14 against the computerize devices 16, 18, 20 situated on shifting

positions or places for television set or camera coordination and control.” ‘334 Patent at 7:17-20.

The specification further states that “the computerized device 16 is comprised of a cinema computer (server) which either includes or is connected externally to a hard disk 36, wherein the cinema computer 34 is connected to a plurality of television set or camera 35 computers 38 . . .” ‘334 Patent at 7:33-36. Thus, the corresponding structure for the recited function is the computerized devices 16, 18, 20.

The specification discloses the algorithm related to the “computerized means” as follows:

An exposure list containing control instructions coordinates and controls the television sets or cameras in question with respect to what shall be exposed, where it shall be exposed, when it shall be exposed, and for how long it shall be exposed. This enables that each television set or camera, independently of other television sets or cameras, to receive the same or different information according to the exposure list for exposure, or display, by respective television set or camera through the computerized devices.

‘334 Patent at 4:63-5:5.

Thus, the disputed term **“computerized control center means for coordinating and controlling electronic displays”** is subject to 35 U.S.C. § 112, ¶ 6, and is construed to mean:

Function: **“coordinating and controlling electronic displays”**

Structure: **“computerized devices 16, 18, 20, which include hard disk 36 and computer 34 configured to perform the steps of: (1) receiving an exposure list containing control instruction; (2) using the exposure list to coordinate and control what shall be exposed, where it shall be exposed, when it shall be exposed, and for how long it shall be exposed; and (3) enabling each electronic display independently of other electronic displays, to receive the same or different information according to the exposure list for exposure or display by respective electronic display and equivalents thereof.”**

### **III. Disputed Terms in the ‘603 Patent**

The ‘603 Patent is titled “System for Direct Placement of Commercial Advertising, Public Service Announcements and Other Content on Electronic Billboard Displays,” was filed on April 28, 1999, and issued on August 6, 2002. The Abstract states:

Commercial advertisers, such as consumer product companies and the advertising agents that represent them, directly access a network of thousands of large, high resolution electronic displays located in high traffic areas and directly send their own advertisements electronically to the network to be displayed at locations and times selected by the advertisers.

#### **a. “various geographic locations” (Claim 13)**

<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
No construction necessary. Plain and ordinary meaning.  Alternatively, “at least two locations geographically separated from each other”	“at least two locations geographically separated from each other—locations within a single building are not ‘geographically separate’”

The underlying dispute is whether locations within a single building would be considered geographically separate. Plaintiff argues that no construction is necessary because “various,” “geographic,” and “locations” are all commonly understood words with widely accepted meanings in the English language. Doc. No. 97 at 33. Defendants argue that locations within a single building are not geographically separate because “[w]hile auditoriums are separate from each other, because they are different rooms, they are not *geographically separate*.” Doc. No. 89 at 29 (emphasis in original).

The specification indicates that “various geographic locations” requires at least two locations geographically separated from each other. The specification states that the prior art required advertisers to “engage in a constant struggle to efficiently use their budgets to most effectively reach their geographic and demographic targets.” ‘603 Patent at 1:23-26. To address this problem, the specification discloses a system that includes a network comprising a plurality

of electronic displays 30 that are located in high traffic areas in various geographic locations. Specifically, the specification states:

Referring to the drawings, and particularly to FIG. 1, there is shown a block diagram of a system 20 for direct placement of commercial advertisements, public service announcements and other content on electronic displays. System 20 includes a network comprising a plurality of electronic displays 30 that are located in high traffic areas in various geographic locations. The displays may be located in areas of high vehicular traffic, and also at indoor and outdoor locations of high pedestrian traffic, as well as in movie theaters, restaurants, sports arenas, casinos or other suitable locations. Thousands of displays, up to 10,000 or more displays worldwide, may be networked according to the present invention. In preferred embodiments, each display is a large (for example, 23 feet by 331/2 feet), high resolution, full color display that provides brilliant light emission from a flat panel screen.

‘603 Patent at 2:50–65. As indicated, the system addresses reaching geographic and demographic targets via a network of electronic displays located at various locations.

Defendants argue that the specification provides examples of discrete locations, including “movie theaters, restaurants, sports arenas, casinos or other suitable locations.” Doc. No. 89 at 30 (citing ‘603 Patent at 2:50–65). According to Defendants, two locations in a movie theater or a restaurant would not constitute various geographic locations. Doc. No. 89 at 30. However, a movie theater and a restaurant located in “a single building” could be considered “geographically separate.” Defendants did not identify any express disclaimer or independent lexicography in the intrinsic evidence that would justify adding this negative limitation.

Thus, the Court construes the disputed term **“various geographic locations”** to mean **“at least two locations geographically separated from each other.”**

## **CONCLUSION**

For the foregoing reasons, the Court hereby **ADOPTS** the above claim constructions for the patents-in-suit. For ease of reference, the Court's claim interpretations are set forth in a table in Appendix A.

So ORDERED and SIGNED this 20th day of February, 2018.

  
\_\_\_\_\_  
K. NICOLE MITCHELL  
UNITED STATES MAGISTRATE JUDGE

## APPENDIX A

Terms, Phrases, or Clauses	Court's Construction
<b>United States Patent No. RE39,470</b>	
“permitting said exposure list to be dynamically updated”	“providing the functionality to instantaneously change the exposure list or change the exposure list after a short delay due to processing or other quickly passing cause”
“means for generating and dynamically updating an exposure list from said control instructions”	Subject to 35 U.S.C. § 112, ¶ 6. <b>Function:</b> “generating and instantaneously changing the exposure list or changing the exposure list after a short delay due to processing or other quickly passing causes using the control instructions” <b>Structure:</b> “Server 3 of central computer 28 configured to perform the steps of: (1) setting-up or creating an exposure list for a specified time period; (2) sorting mediator information into the exposure list in accordance with the wishes of the mediator or its instructions, when available space is found in the exposure list or in alternative places in the exposure list given by the mediator; and (3) if the exposure list is completely filled with instructions, the mediator instructions to the control centre remain in the queue list in the server in readiness for later inclusion in the exposure list and equivalents thereof.”
“means for displaying images in accordance with said exposure list associated with each one of said computerized devices”	Subject to 35 U.S.C. § 112, ¶ 6. <b>Function:</b> “displaying images in accordance with the exposure list associated with each one of said computerized devices” <b>Structure:</b> “projector computer 38 connected to projector 22 or an electronic display, or equivalents thereof”
“external information mediator”	“third-party supplier of information for display”
“mediator/mediators of information”	“third-party supplier of information for display”
<b>United States Patent No. 7,382,334</b>	
“update an exposure list having control instruction fields, via dynamic booking of display information from mediators”	“instantaneously changing the exposure list or changing the exposure list after a short delay due to processing or other quickly passing causes, via dynamic booking of display information from mediators”
“able to create and update said exposure list in real time with control instruction fields via dynamic	Indefinite.

booking of information in time for exposure from mediators”	
“computerized control center means” and “exposure handler means whereby the control center functions, in real time and through the medium of said exposure handler, to create and update and exposure list having control instruction fields, via dynamic booking of display information from mediators” to be	<p>Subject to 35 U.S.C. § 112, ¶ 6.</p> <p><b>Function:</b> “create and instantaneously change the exposure list or change the exposure list after a short delay due to processing or other quickly passing causes, via dynamic booking of display information from mediators”</p> <p><b>Structure:</b> “interface 14, modem 26, servers 1, 2, 3 of central computer 28 configured to perform the steps of: (1) receiving information from mediators; (2) setting-up or creating an exposure list for a specified time period; (3) sorting mediator information into the exposure list in accordance with the wishes of the mediator or its instructions, when available space is found in the exposure list or in alternative places in the exposure list given by the mediator; (4) if the exposure list is completely filled with instructions, the mediator instructions to the control centre remain in the queue list in the server in readiness for later inclusion in the exposure list; and (5) sending information to the computerized devices and equivalents thereof”</p>
“computerized control center means for coordinating and controlling electronic displays”	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p><b>Function:</b> “coordinating and controlling electronic displays”</p> <p><b>Structure:</b> “computerized devices 16, 18, 20, which include hard disk 36 and computer 34 configured to perform the steps of: (1) receiving an exposure list containing control instruction; (2) using the exposure list to coordinate and control what shall be exposed, where it shall be exposed, when it shall be exposed, and for how long it shall be exposed; and (3) enabling each electronic display independently of other electronic displays, to receive the same or different information according to the exposure list for exposure or display by respective electronic display and equivalents thereof”</p>
<b>United States Patent No. 6,430,603</b>	
“various geographic locations”	“at least two locations geographically separated from each other”